

**CALIFORNIA REGIONAL WATER QUALITY CONTROL BOARD
CENTRAL VALLEY REGION**

ORDER NO. R5-2010-XXXX

**WASTE DISCHARGE REQUIREMENTS GENERAL ORDER
FOR
DAIRIES WITH MANURE ANAEROBIC DIGESTER OR CO-DIGESTER FACILITIES**

The California Regional Water Quality Control Board, Central Valley Region (hereafter, Central Valley Water Board), finds that:

SCOPE OF COVERAGE OF THIS ORDER

1. This Order serves as a general waste discharge requirements order (Order) for discharges of dairy and dairy manure digester or co-digester waste from dairy facilities with anaerobic digesters or co-digesters permitted by this Order.
2. This Order applies to the owners of land upon which a dairy with a dairy manure digester or a dairy co-digester is located, the owners and/or operators of the dairy and the owners and/or operators of the dairy manure digester or co-digester facility. These individuals or entities are hereinafter referred to as Discharger(s). Multiple Dischargers associated with the same facility must jointly enroll under this Order by submitting a combined Notice of Intent (NOI).
3. Dairy manure digesters which are in compliance with Waste Discharge Requirements General Order for Existing Milk Cow Dairies, Order No. R5-2007-0035 (Dairy General Order) are not subject to this Order.

REASON FOR THE CENTRAL VALLEY WATER BOARD ISSUING THIS ORDER

4. Dairies, dairy manure digesters, and dairy co-digesters produce wastes that have the potential to impact the quality of waters of the State.
5. The Central Valley Water Board's authority to regulate waste discharges that could affect the quality of the waters of the State which includes both surface water and groundwater and the prevention of nuisances, is found in the Porter-Cologne Water Quality Control Act (California Water Code Division 7).
6. California Water Code (CWC) Section 13260 requires any person within the Central Valley Region that is discharging waste, or proposing to discharge waste that could affect the quality of the waters of the State, which includes both surface water and groundwater, to file a report of waste discharge with the Central Valley Water Board.

7. The Central Valley Water Board prescribes waste discharge requirements for proposed, existing, or material changes in discharges of waste and must implement the relevant water quality control plans. The Central Valley Water Board may prescribe general waste discharge requirements to a category of discharges if all the following criteria apply to the discharges in that category.
 - a. The discharges are produced by the same or similar operations.
 - b. The discharges involve the same or similar types of waste.
 - c. The discharges require the same or similar treatment standards.
 - d. The discharges are more appropriately regulated under general discharge requirements than individual discharge requirements.
8. In regulating discharges of waste, the Central Valley Water Board implements State laws and regulations. California regulations governing discharges from confined animal facilities are contained in Title 27 of the California Code of Regulations (CCR), Division 2, Subdivision 1, Chapter 7, Subchapter 2, Article 1.
9. For the purposes of this Order, "waste" includes, but is not limited to: solid manure; leachate; digester solids (digestate solids produced by the digestion process); digester liquids; gas scrubber waste (produced during the cleaning of the biogas); digester/co-digester feedstocks; dairy manure digester or co-digester process wastewater; tailwater from land application areas; and any water, precipitation or rainfall runoff, that contacts raw materials, products, or by-products such as manure, compost piles, feed, silage, animal bedding, or digester generated soil amendments.

BACKGROUND

10. On 25 April 2006, Governor Arnold Schwarzenegger issued an Executive Order S-06-06, which found that sustained biomass development offers strategic energy and economic, social, and environmental benefits to California while creating jobs through increased private investment within the state. Executive Order S-06-06 also established targets for the use and production of biofuels and biopower and instructed state agencies to work together to advance biomass programs in California.
11. The California Energy Commission's July 2006 *Bioenergy Action Plan for California* (Publications Number CEC-600-2006-010) recognizes that key challenges to the development of bioenergy in California are that its benefits are not adequately recognized or compensated by the market, and that bioenergy

faces a range of challenges and impediments, many of which can be addressed by State action. The Bioenergy Action Plan recommends that California consider ways to simplify regulatory hurdles to siting and permitting of bioenergy projects.

12. On 18 September 2007, the State Water Resources Control Board (State Water Board) adopted Resolution No. 2007-0059, which resolved that the State Water Board *"supports implementation of the Bioenergy Action Plan for California dated July 2006 and renews its commitment in this plan to identify clear and consistent procedures that are used to protect water quality from the harvesting of biomass and the operation of biomass facilities; conduct prompt reviews of planning documents, environmental documents prepared under the California Environmental Quality Act (CEQA) and monitoring proposal for biomass harvesting and biomass facilities; and, work ... to ensure that adequate criteria for water protection and water quality are put into place on agricultural and forest lands in California."*
13. On 17 November 2008, Governor Arnold Schwarzenegger issued Executive Order S-14-08 to streamline California's renewable energy project approval process and to establish the State's Renewable Portfolio Standard target of 33 percent renewable energy by 2020. This Executive Order directs all State regulatory agencies to give priority to renewable energy projects and to facilitate the timely permitting of these projects.
14. Dairy manure, when used as a feedstock in anaerobic digesters or co-digesters, can provide a significant amount of renewable energy in the form of biogas. Biogas can be cleaned of impurities and injected directly into transmission pipelines, or can be used to generate other forms of energy.
15. This Order addresses the recommendations of the *Bioenergy Action Plan for California*, and Executive Orders S-06-06 and S-14-08. It encourages bioenergy projects involving dairy manure digesters and co-digesters by streamlining the Central Valley Water Board's permitting process through the use of general waste discharge requirements for dairy manure digester or dairy co-digester projects.
16. Each Discharger covered by this Order shall submit an application fee equal to the annual fee, pursuant to CWC section 13260. The amount of the annual fee for confined animal facilities is currently determined based primarily upon the number of animals at the facility, as detailed in Section 2200(c), Chapter 9, Division 3, Title 23, CCR. Fees for dairy manure digester and co-digester projects are set forth in the "Dairy" subgroup of the confined animal facilities group.
17. To obtain coverage under this Order, a completed application packet consisting of Facility Information Report (FIR), a Notice of Intent (NOI) and the appropriate application fee must be submitted to the Central Valley Water Board for each

project. Once a completed application packet is received, Central Valley Water Board staff will evaluate the project to determine if it is suitable for regulation under this Order. Only after a determination of applicability is made will the Discharger(s) be issued a Notice of Applicability (NOA) by the Central Valley Water Board Executive Officer. Only applicants (Dischargers) who submit a complete FIR, NOI, and application fee, and are issued a Notice of Applicability are authorized to discharge waste to land in accordance with the terms and conditions of this Order.

DAIRY AND DAIRY MANURE DIGESTERS OR CO-DIGESTERS

18. Dairies and dairy manure digester/co-digester facilities generally consist of a production area(s) and land application area(s). The production area(s) may include barns, corrals, feed-lanes, milking parlor, the digester, feed and feedstock storage areas, waste management components such as solids separators, wastewater retention ponds, digestate (digester solid residuals) storage areas, stormwater retention ponds, and pumps and piping to distribute waste to the land application areas for nutrient reuse. The land application area(s) is land under the Discharger's control, whether it is owned, rented, or leased, to which manure, process wastewater, digestate or digester generated soil amendments from the production area(s) is or may be applied for nutrient recycling.
19. Dairy manure digesters and dairy co-digesters generally consist of one of three basic types of digester systems, although many variations and gradations between these basic types exist. The three basic types include the following:
 - a. ambient-temperature anaerobic covered lagoons,
 - b. plug-flow digesters, and
 - c. complete mix systems.
20. Anaerobic digestion is the biological decomposition of organic matter in the absence of molecular oxygen. This Order regulates both manure digestion and co-digestion processes, which differ according to feedstock. The anaerobic digestion process results in the production of biogas, digester solid residuals, and process wastewater. The biogas consists primarily of methane (CH_4), which can be used for energy, and carbon dioxide (CO_2), with small amounts of hydrogen sulfide (H_2S), and ammonia (NH_3). Typically biogas is saturated with water vapor and may have trace amounts of hydrogen (H_2), nitrogen (N_2), oxygen (O_2), dust and siloxane (compounds containing alternating silicon and oxygen atoms, usually with one or more organic groups attached to each silicon atom). The residual products from anaerobic digestion are process wastewater and digestate. The anaerobic digestion process occurs naturally in marshes, wetlands, and is the principal decomposition process in landfills.

WASTE DISCHARGE REQUIREMENTS ORDER NO. R5-2010-XXXX
GENERAL ORDER FOR DAIRIES WITH MANURE ANAEROBIC
DIGESTER OR CO-DIGESTER FACILITIES

5

DRAFT

DAIRY AND DAIRY MANURE DIGESTER OR CO- DIGESTER IMPACTS ON WATER QUALITY

21. Dairy, dairy manure digester and dairy co-digester wastes, when inadequately controlled can affect surface water quality. This Order prohibits discharges of waste and/or storm water to surface water from the production area, wastewater to surface waters from cropland, and storm water to surface water from a land application area where manure or process wastewater has been applied unless the land application area has been managed consistent with a certified Nutrient Management Plan. When such discharges of storm water occur, this Order requires the Discharger to monitor these discharges.
22. Historical groundwater monitoring has shown that some dairies in the Central Valley Region have impacted groundwater quality. This Order requires that each NOI submitted for a proposed dairy manure digester or dairy co-digester facility be reviewed prior to issuance of an NOA. If in reviewing the FIR and NOI, Central Valley Water Board staff find that the proposed discharge will pose a threat of contributing to or causing exceedances of water quality objectives, the project applicant will be required to minimize the potential water quality impacts of the project by modifying the proposed discharge activities or providing additional information to verify that the proposed discharge will not cause or contribute to an exceedances of water quality objectives or background water quality, whichever is greater. Verification that the proposed project will not cause or contribute to water quality pollution will require that sufficient information be submitted by a qualified professional engineer, professional geologist, or other qualified professional such that Central Valley Water Board staff can make a finding that the proposed discharge can comply with the provisions of this Order. Modifications to the proposed facility may be necessary for compliance with provisions of the Order. Additional information beyond that required by the FIR and NOI may be needed to determine whether the project can comply with the Order. Additional information may include, but is not limited to the following:
 - a. Additional groundwater monitoring data in areas where local hydrogeologic conditions could make the groundwater susceptible to contamination;
 - b. Identification whether the proposed dairy manure digester/co-digester is within an area where California Department of Public Health's, Drinking Water Source Water Assessment and Protection (DWSWAP) Program setback requirements are implemented for source protection for both municipal and domestic wells; and

- c. Information about any unique local site and hydrogeologic conditions in the design of the project and/or other groundwater quality management or regulatory programs which are currently active in the area.
23. This Order requires that waste generated at a dairy and/or a dairy manure digester facility that can affect groundwater quality may only be applied to land application areas in accordance with a site specific Nutrient Management Plan (NMP).
24. This Order requires the dairy and digester operators to prepare and submit a Waste Management Plan to ensure that the production area of the dairy and digester facilities are designed, constructed, operated and maintained so that wastes generated by the facilities are managed to prevent conditions of nuisance or adverse impacts to groundwater and surface water quality.
25. No set of waste management practices has been demonstrated to be protective of groundwater quality in all circumstances. Since groundwater monitoring is the most direct way to determine if management practices for dairy and dairy manure digester/co-digester operations are protective of groundwater quality, Monitoring and Reporting Program No. R5-2010-XXXX, which is attached to and made part of this Order, requires groundwater monitoring to determine if a dairy and associated digester facility is in compliance with the groundwater limitations contained in this Order. If an approved representative groundwater monitoring program exists, and the Discharger can demonstrate that it applies to the proposed project, the Executive Officer may allow the Discharger to use data gathered from the representative groundwater monitoring program to substitute for some or all of the required groundwater monitoring.

REGULATORY CONSIDERATIONS

26. The *Water Quality Control Plan for the San Joaquin and Sacramento River Basins*, Fourth Edition (San Joaquin and Sacramento River Basins Plan) and the *Water Quality Control Plan for the Tulare Lake Basin*, Second Edition (Tulare Lake Basin Plan) designate beneficial uses, establish water quality objectives, and contain implementation plans and policies for protecting waters of the State within the basins.
27. The Basin Plans establish narrative water quality objectives for chemical constituents, tastes and odors, and toxicity. The toxicity objective, in summary, requires that waters of the State (surface and groundwater) be maintained free of toxic substances in concentrations that produce detrimental physiological responses in human, plant, animal, or aquatic life associated with designated beneficial uses.

28. The Tulare Lake Basin Plan identifies the greatest long-term problem facing the entire Basin as the increase in salinity in groundwater, which has accelerated due to the intensive use of soil and water resources by irrigated agriculture. The Tulare Lake Basin Plan recognizes that degradation is unavoidable without a plan for removing salts from the Basin and that salt sources should be managed to the extent practicable to reduce the rate of ground water degradation until there is a long-term solution to the salt imbalance.
29. The Central Valley Water Board is concerned with the potential long-term effects of salt and nutrient loading on surface and groundwater resources throughout the Central Valley. Central Valley Salinity Alternatives for Long-Term Sustainability (CV-SALTS) is a collaborative planning effort aimed at developing and implementing a comprehensive salinity and nitrate management program. This Order requires the Discharger to complete a Salinity Minimization Plan (SMP) to identify sources of salinity in the discharge and measures available to minimize the concentration and mass loading of salinity. The Order may be reopened in the future to incorporate applicable recommendations from the CV-SALTS management program.
30. This Order implements the requirements of State Water Resources Control Board Resolution 68-16 (*Statement of Policy with Respect to Maintaining High Quality of Waters in California*), Title 27 CCR requirements regulating confined animal facilities, the Central Valley Water Board's Sacramento and San Joaquin River Basin Plans and the Tulare Lake Basin Plan, and other applicable plans and policies of the State Water Resources Control Board (State Water Board) and the Central Valley Water Board described in the Information Sheet, which is attached to and made part of this Order.
31. This Order prohibits point-source discharges to surface waters unless a National Pollutant Discharge Elimination System (NPDES) permit for the discharges has been obtained, and requires implementation of best practicable treatment or control (BPTC), nutrient management, and a salt reduction plan to minimize potential impacts to groundwater.
32. This Order is consistent with the Sacramento and San Joaquin River and Tulare Lake Basin Plans because it requires compliance with applicable water quality standards and requires the prevention of nuisance. This Order is consistent with State Water Board Resolution 68-16, requiring implementation of BPTC for all wastes, coupled with groundwater monitoring and reporting to determine effects on groundwater quality. This Order, requires chemical analysis of the digester solids (digestate) prior to their use as a digester generated soil amendment, and requires chemical analysis of the process wastewater to ensure compliance with a certified NMP.

33. Discharge of waste at confined animal facilities, including dairies, is regulated by Title 27 CCR, Division 2, Chapter 7 Division 2 (commencing at section 22560) (Title 27). Depending upon individual waste constituents and concentrations, co-digester waste may be regulated pursuant to the requirements of Title 27, CCR, Section 20005 et seq.
34. The Title 27 regulations for confined animal facilities are minimum standards. The Central Valley Water Board is authorized to impose more stringent requirements as necessary to protect water quality.
35. Best management practices for protection of water quality underlying the land application areas include application of waste at rates which are reasonable for the crop, soil, climate, special local situations, management system, and type of manure consistent with Title 27, Section 22563(a). Reasonable application is considered to be application of wastes at a rate that does not unreasonably degrade and does not pollute the waters of California or create a nuisance condition. Reasonable application is achieved by the implementation of an appropriate Nutrient Management Plan (NMP) to maximize harvest and minimize leaching of waste constituents.
36. The discharge of wastewater from a dairy manure digester/co-digester is regulated by this Order. With appropriate containment of liquid supplemental feedstocks and wastewater, and application of wastewater to land application areas at agronomic rates and in accordance with an approved Nutrient Management Plan, the discharge of dairy manure digester/co-digester wastewater should not cause exceedance of groundwater quality objectives.
37. This Order regulates the discharge of solid waste (digestate) generated by the dairy manure digester/co-digester when used as a digester generated soil amendment on land application areas. With appropriate storage and application to land application areas at agronomic rates and in accordance with a certified NMP, solid wastes generated by a dairy manure digester/co-digester should not cause an exceedance of groundwater quality objectives.
38. Some biogas scrubber systems produce an acidic waste. If the pH of the biogas scrubber waste is 2.0 or below, the waste could be classified as hazardous. This Order requires that biogas scrubber waste be chemically tested, and if necessary, disposed off site at an appropriately permitted facility. This Order prohibits the on-site disposal of hazardous waste.
39. Some areas in California have been designated as unique and valuable public resources. Such areas have been defined in the State law and the CCR as jurisdictional waters or preserves or have been addressed through acts specifically

intended to preserve and manage the resource. Discharges of waste to those areas as described below are not eligible for coverage under this Order:

- a. An area within one quarter mile of a wild and scenic river, as defined by PRC section 5093.5.
- b. The Sacramento-San Joaquin Delta, as defined in CWC section 12220.
- c. The Suisun Marsh, as defined in (PRC) section 29101.

CALIFORNIA ENVIRONMENTAL QUALITY ACT

40. The Central Valley Water Board is the lead agency for purposes of the California Environmental Quality Act (CEQA) (Public Resources Code Section 21000 et seq.) with respect to adoption of this Order. An Initial Study (IS) and Notice of Preparation (NOP) for dairy manure digester projects was prepared by Environmental Services Associates (ESA) for the Central Valley Water Board and was circulated by the Central Valley Water Board on 18 March 2010. Three scoping meetings were held at the Central Valley Water Board offices, two in Rancho Cordova and one in Fresno, to receive comments on the IS and NOP.
41. A Technical Advisory Group (TAG) was assembled and met multiple times to advise staff regarding pertinent environmental issues related to preparation of the EIR. The TAG consisted of representatives from the State Water Resources Control Board, California Air Pollution Control Board, air districts, California Department of Fish and Game, California Energy Commission, California Public Utilities Commission, California Department of Food and Agriculture, CalRecycle, local enforcement agencies, environmental justice organizations, environmental organizations, and individuals.
42. On 8 July 2010, the Central Valley Water Board circulated a Dairy Manure Digester and Co-digester Facilities, Draft program Environmental Impact Report (EIR) for public comment. Public comments were received until 23 August 2010, and responses to comments were prepared.
43. On [DATE Leave Blank], in accordance with the California Environmental Quality Act (CEQA), the Central Valley Water Board, acting as the lead agency, adopted Resolution No. XXXXXXXXXX which certified the Dairy Manure Digester and Co-digester Facilities, EIR.
44. This Order incorporates all mitigation measures for the significant environmental impacts identified in the Dairy Manure Digester and Co-digester Facilities program EIR, except for measures within the jurisdiction of other public agencies.

Mitigation measures addressing significant impacts under the jurisdiction of other public agencies can and should be adopted by those agencies as identified in **Appendix _____** of the EIR. With respect to impacts 5.6 and 6.6 identified in the EIR, the Central Valley Water Board, on **date**, made a finding of overriding considerations in accordance with 14 CCR §15093. That finding is incorporated by reference into this Order.

45. With respect to existing dairy facilities, this Order is exempt from CEQA under CEQA Guidelines Exemption 1 for Existing Facilities (14 CCR 15301) which applies to *“the operation, repair, maintenance, permitting, leasing, licensing, or minor alteration of existing public or private structures, facilities, mechanical equipment, or topographical features, involving negligible or no expansion of use beyond that existing at the time of the lead agency’s determination.”* The term “existing facilities” is defined in Attachment G. Any required replacement or reconstruction of waste management systems at existing facilities or minor improvements or alterations to such systems are also exempt from CEQA consistent with CEQA Guidelines Exemption 2 for Replacement of Existing Structures (Cal. Code of Regs., tit. 14, §15302) and CEQA Guidelines Exemption 4 for Minor Alterations (Cal. Code of Regs., tit. 14, §15304).
46. If a dairy manure digester or co-digester facility is constructed on a dairy facility that is not an existing facility, coverage under this Order may be provided only if the Board’s action is supported by an additional CEQA analysis that tiers off the Dairy Manure Digester and Co-digester Facilities Program EIR and addresses the environmental impacts associated with the new or expanded dairy facility. (14 CCR 15152). If the tiered CEQA analysis indicates that the impacts of the dairy facility will not be adequately mitigated under the provisions of this Order, the facility will be regulated under an individual order.
47. Food and Agricultural Code Section 33487 provides a statutory exemption from CEQA for dairy farms under the following circumstances: (1) when the dairy will be constructed and operated in accordance with the minimum standards in Chapter 5 of the Food and Agricultural Code; (2) where the applicable local agencies have completed all necessary reviews and approvals including that required by CEQA; and (3) where a permit for construction was issued by a local agency on or after the effective date of Food and Agricultural Code Section 33487 and construction has begun.

ANTIDEGRADATION

48. State Water Resources Control Board Resolution 68-16 requires that a Regional Water Quality Control Board maintain the high quality of waters of the state unless the Board determines that some degradation is consistent with the maximum benefit to the people of the state. The Board must assure that any activity which

discharges a waste to existing high quality waters must meet waste discharge requirements which will result in the best practicable treatment or control (BPTC) of the discharge necessary to assure that pollution (i.e., exceedance of water quality objectives, or nuisance) will not occur and the highest water quality consistent with the maximum benefit to the people of the State will be maintained.

49. The Federal Antidegradation Policy (section 131.12, Title 40, CFR) applies to discharges to surface waters. The State Water Board has interpreted Resolution No. 68-16 to incorporate the Federal Antidegradation Policy in situations where that policy is applicable. (State Water Board Order No. WQ 86-17).
50. Resolution 68-16 applies only to high quality waters. High quality waters are water bodies with levels of water quality constituents or characteristics that are better than the established water quality objectives. Whether a water is a high quality water is established by constituent or parameter. Waters can be of high quality for some constituents or beneficial uses, but not for others.
51. In the context of this Order, which may potentially regulate discharges to numerous water bodies, each with a number of constituents, there is not sufficient data to fully determine which waters, if any, are not high quality waters. To the extent a discharge under this Order may be to high quality waters, this Order is consistent with Resolution 68-16 as outlined in the findings below.
52. This Order requires that discharges of waste from the dairy and/or the dairy manure digester facilities not cause groundwater to exceed water quality objectives or background quality, whichever is greater, unreasonably affect beneficial uses, or cause a condition of pollution or nuisance. This Order further requires the implementation of BPTC. With regard to surface water discharges, this Order prohibits discharges to surface water from the production area, the discharge of wastewater to surface water from the land application area, the discharge of storm water to surface water from the land application area for dairy co-digesters and prohibits these discharges from dairy manure digesters unless the land application area has been managed consistent with a certified Nutrient Management Plan, and any discharge to surface waters which causes or contributes to an exceedance of any applicable water quality objective in the Basin Plans or any applicable state or federal water quality criteria, or a violation of any applicable state or federal policies or regulations.
53. Dischargers subject to this Order must implement BPTC. BPTC measures include, but are not limited to preparation and implementation of a nutrient management plan, containment system specifications for ponds in which dairy manure digester or co-digester waste will be stored, a salt minimization plan, and a waste management plan. This Order additionally requires monitoring of co-digester feedstocks, and groundwater monitoring or membership in an approved

Representative Monitoring Program to ensure that implemented practices are protective of water quality. Based on groundwater monitoring, further waste management improvements may be required. As a result, dairy and dairy manure digester facilities under this Order will minimize their impacts to groundwater upon compliance with this Order.

54. Dairy manure digesters and co-digesters regulated by this Order will provide both economic and environmental benefits. Construction of dairy manure digesters and co-digesters will enhance local employment, specifically during the construction phase, and will preserve employment on the dairy after construction and during operation. Biogas generated from dairy manure digesters and co-digesters will reduce greenhouse gas emissions from manure emissions, offset fossil fuel use, and divert co-digestion feedstocks from landfills. Biogas created in dairy manure digesters and co-digesters is a source of renewable energy, which can improve the reliability of California's energy supplies. For these and other reasons, any degradation of water quality that may occur as a result of dairy manure digesters and codigesters regulated under this Order is consistent with maximum benefit to the people of the State.
55. This Order addresses impacts from future discharges of waste, but does not address the cleanup of existing degraded surface and groundwater from past dairy operations. Any required cleanup actions are handled under separate authority under the Water Code.

GENERAL FINDINGS

56. This Order does not authorize violation of any federal, state, or local law or regulation.
57. Pursuant to the CWC Section 13263(g), the discharge of waste into waters of the state is a privilege, not a right, and adoption of this Order does not create a vested right to continue the discharge of waste. Failure to prevent conditions that create or threaten to create pollution or nuisance or that may unreasonably degrade waters of the State will be sufficient reason to modify, revoke, or enforce this Order, as well as prohibit further discharge.
58. This Order is not a National Pollutant Discharge Elimination System Permit issued pursuant to the Federal Clean Water Act. Coverage under this Order does not exempt a facility from the Clean Water Act. Any facility required to obtain such a permit must notify the Central Valley Water Board.
59. The CWC Section 13267(b) states that "In conducting an investigation specified in subdivision (a), the regional board may require that any person who has discharged, discharges, or is suspected of having discharged or discharging, or

who proposes to discharge waste within its region, or any citizen or domiciliary, or political agency or entity of this state who has discharged, discharges, or is suspected of having discharged or discharging, or who proposes to discharge waste outside of its region that could affect the quality of waters within its region shall furnish, under penalty of perjury, technical or monitoring program reports which the regional board requires. The burden, including cost, of these reports shall bear a reasonable relationship to the need for the report and the benefits to be obtained from the reports. In requiring these reports, the regional board shall provide the person with a written explanation with regard to the need for the reports and shall identify the evidence that supports requiring that person to provide the reports.”

60. The technical reports required by this Order and the attached Monitoring and Reporting Program No. R5-2010-XXXX are necessary to assure compliance with these waste discharge requirements.
61. These requirements are consistent with the minimum standards of Title 27, CCR, Division 2, Subdivision 1, Chapter 7, Subchapter 2, Article 1 (Title 27) regulating discharges from confined animal facilities. As necessary to protect water quality, this Order contains requirements that are more stringent than provided by Title 27.
62. This Order does not preempt or supersede the authority of local agencies to prohibit, restrict, or control the use of the dairy and/or the dairy manure digester or co-digester wastes subject to the authorities’ control, as allowed under current law. It is the responsibility of the Discharger to make inquiry and to obtain any local governmental agency permits or authorizations prior to the application of dairy manure digester or co-digester waste at each site.
63. The Findings of this Order, supplemental information and details in the attached Information Sheet, and the Central Valley Water Board record on dairy manure digester facilities were considered in establishing the conditions of discharge.
64. The Central Valley Water Board has notified interested agencies and persons of its intent to issue this Order for discharges of wastes from dairies with digester or co-digester facilities, and has provided them with an opportunity for a public hearing and an opportunity to submit comments.
65. The Central Valley Water Board, in a public meeting, heard and considered all comments pertaining to the proposal to regulate discharges of wastes from dairies with digester or co-digester facilities under this Order.
66. Any person affected by this action of the Central Valley Water Board may petition the State Water Resource Control Board (State Water Board) to review this action. The State Water Board must receive the petition within 30 days of the date on

which the Central Valley Water Board adopted this Order. Copies of the law and regulations applicable to filing petitions will be provided upon request.

67. The Central Valley Water Board will review this Order periodically and may revise requirements when necessary.

IT IS HEREBY ORDERED that, pursuant to California Water Code Sections 13260, 13263, and 13267 and in order to meet the provisions contained in Division 7 of the California Water Code and regulations and policies adopted hereunder; all Dischargers specified by the Central Valley Water Board and all Dischargers that have submitted the appropriate fee, a completed Facility Information Report (FIR) and a complete NOI, their agents, successors, and assigns shall comply with the following:

A. PROHIBITIONS

1. The discharge of waste, other than as defined in Finding 38 above, or hazardous waste, as defined in Title 22 CCR Section 66261.3 is prohibited.
2. Except when authorized by a National Pollutant Discharge Elimination System permit, the direct or indirect discharge of waste and/or storm water from the production area to surface waters is prohibited¹.
3. The discharge of waste from milk cow dairies, dairy manure digesters, or co-digester operations to surface waters which causes or contributes to an exceedance of any applicable water quality objective in the appropriate Basin Plans or any applicable state or federal water quality criteria, or a violation of any applicable state or federal policies or regulations is prohibited².
4. The collection, treatment, storage, discharge, or disposal of wastes at an existing milk cow dairy, dairy manure digester, or co-digester operation that results in (1) discharge of waste constituents in a manner which could cause degradation of surface water or groundwater except as allowed by this Order, (2) contamination or pollution of surface water or groundwater, or (3) a condition of nuisance (as defined by the California Water Code Section 13050) is prohibited.

¹ Discharges of pollutants from the production area to waters of the United States may not lawfully occur except in compliance with a National Pollutant Discharge Elimination System (NPDES) permit. NPDES permit coverage is not provided by this Order, it must be obtained separately.

² It is important to note that this General Order prohibits the direct or indirect discharge of waste and/or storm water from the production area to surface waters, the discharge of wastewater to surface waters from cropland, and the discharge of storm water to surface water from a land application area where manure or process wastewater has been applied unless the land application area has been managed consistent with a certified Nutrient Management Plan.

5. The disposal of dead animals in any liquid manure, process wastewater system, or dairy manure digester is prohibited. The disposal of dead animals at a dairy facility is prohibited except when federal, state or local officials declare a State of Emergency and where all other options for disposal have been pursued and failed and the onsite disposal complies with all state and local policies for disposal of dead animals³.
6. All animals shall be prohibited from entering any surface water within the animal confinement area.
7. The application of waste to lands not owned, leased, or controlled by the Discharger without written permission from the landowner or in a manner not approved by the Executive Officer, is prohibited.
8. The land application of manure, process wastewater, or digestate/digester generated soil amendment to land application areas for other than nutrient recycling is prohibited.
9. The discharge of wastewater to surface waters from land application areas, and the discharge to surface waters from tile drainage systems than underlie co-digester land application areas when imported co-digestion feedstocks are used, is prohibited. Irrigation supply water that comes into contact or is blended with waste or wastewater shall be considered wastewater under this Prohibition.
10. The application of process wastewater to a land application area before, during, or after a storm event that would result in runoff of the applied water is prohibited.
11. The use of manure or digestate to construct containment structures or to repair, replace, improve, or raise existing containment structures is prohibited.
12. The direct discharge of wastewater into groundwater via backflow through water supply or irrigation supply wells is prohibited.
13. The discharge of wastewater to surface waters from cropland without a NPDES permit is prohibited.
14. Discharges of storm water to surface water from the land application area where manure, process wastewater, or liquid or solid waste produced by a manure only digester has been applied is prohibited unless the land application area has been managed consistent with a certified Nutrient Management Plan.

³ In an emergency, guidance is provided by the *CAL/EPA Emergency Animal Disease Regulatory Guidance for Disposal and Decontamination* (October 20, 2004).

15. Discharges or storm water to surface water from the land application area where manure, process wastewater, or liquid or solid waste produced by a dairy co-digester has been applied is prohibited.
16. Bypass or overflow of undigested non-manure digester feedstock into the wastewater retention system or onto the land application area is prohibited.
17. Exceeding the mature herd size (milk and dry cows) as authorized by the local permitting authority, and/or as documented in the NOI, is prohibited.
18. The use of biosolids, mammalian tissue, human waste (e.g., sludge, septage, domestic and municipal wastewater), in a co-digester, or application of these materials to a land application area is prohibited.
19. Solid manure, digestate, digester generated soil amendment or applications of process wastewater to land where crop material is not removed is prohibited (e.g., a pasture that is not mowed and the cuttings removed).

B. GENERAL SPECIFICATIONS

1. The dairy and dairy manure digester/co-digester shall have facilities that are designed, constructed, operated, and maintained to retain all wastewater generated during the storage period (maximum period of time anticipated between land application of wastewater), together with all precipitation on and drainage through manured areas, feedstock storage areas, and waste storage areas up to and including during a 25-year, 24-hour storm (see Section II. of Attachment E (WMP), which is attached to and made part of this Order).
2. In the Sacramento and San Joaquin River Basins, ponds and manured areas at existing milk cow dairies in operation on or before 27 November 1984 shall be protected from inundation or washout by overflow from any stream channel during 20-year peak stream flows. Existing milk cow dairies that were in operation on or before 27 November 1984 and that are protected against 100-year peak stream flows must continue to provide such protection. Existing milk cow dairies built or expanded after 27 November 1984 shall be protected against 100-year peak stream flows (Title 27 Section 22562(c)).
3. In the Tulare Lake Basin, animal confinement facilities and their related retention ponds that existed as of 25 July 1975 shall be protected from inundation or washout from overflow from stream channels during 20-year peak stream flows and protected from 100-year peak stream flows for facilities that were constructed after 25 July 1975.

4. Wastes and land application areas shall be managed to prevent contamination of crops grown for human consumption.
5. Dischargers shall provide an engineering evaluation of an existing pond and propose and implement approved remedial measures when groundwater monitoring demonstrates that an existing pond has adversely impacted groundwater quality.
6. Existing dairy ponds which comply with General Specifications B-7 of the Dairy General Order (Order No. R5-2007-0035) may be utilized for a dairy manure only digester if the pond is not enlarged or reconstructed. Any new ponds or enlarged or reconstructed ponds to be used as a dairy manure digester or to store dairy or digester wastewater shall be designed and constructed to comply with the groundwater limitations of this Order and General Specification B.8, B.9, B.10 and B.11, prior to use.
7. Any pond to be used as a dairy co-digester or to store imported digester feedstock or digester process wastewater or digester solids (digestate) or other digester wastes shall be designed and constructed to comply with the groundwater limitations of this Order and General Specification B.8, B.9, B.10, and B.11, prior to use.
8. Pond design must be reviewed and approved by the Executive Officer prior to construction. This Order provides a tiered approach to pond design as defined below:
 - a. Tier 1: A pond designed to consist of a double liner constructed with 60-mil high density polyethylene or material of equivalent durability with a leachate collection and removal system (constructed in accordance with Section 20340 of Title 27) between the two liners will be considered to be consistent with Resolution 68-16.
 - b. Tier 2: Any non-Tier 1 pond design that the Discharger demonstrates through submittal of technical reports is protective of groundwater quality as required in General Specification B.9 below.
9. Prior to the enlargement of an existing dairy or dairy manure digester/co-digester settling, storage, or retention pond or the construction of any such new pond, the Discharger shall submit to the Executive Officer:
 - a. For a Tier 1 and 2 pond design, a design report prepared by, or under the direct supervision of, and certified by, a Civil Engineer or Certified Engineering Geologist who is registered pursuant to California law or other person as may be permitted under the provisions of the California Business and Professions

Code to assume responsible charge of such work. The design report shall include the following, as specified in the Waste Management Plan (WMP) (Attachment E, attached to and made part of this Order):

- i. Design calculations demonstrating that adequate containment will be achieved,
 - ii. Details on the liner and leachate collection and removal system materials (if appropriate),
 - iii. A schedule for construction and certification of completion,
 - iv. A construction quality assurance plan describing testing and observations needed to document construction of the pond in accordance with the design and Sections 20323 and 20324 of Title 27, and
 - v. An operations and maintenance plan for the pond.
- b. For a Tier 2 pond design, the design report shall also include a technical report and groundwater model that demonstrates the proposed pond provides BPTC and is protective of groundwater quality. The Tier 2 pond design must comply with the groundwater limitations in this Order, including calculations that demonstrate the amount and quality of seepage from the proposed pond and its effect on groundwater quality, and include proposed groundwater monitoring to evaluate the impact of pond seepage on groundwater quality.

Enlargement of any existing pond or construction of any new pond shall not begin until the Executive Officer notifies the Discharger in writing that the design report is acceptable.

10. Prior to the placement of waste in any new or enlarged dairy or dairy manure digester/co-digester settling, storage, or retention pond, the Discharger shall submit a post construction report prepared by, or under the direct supervision of, and certified by, a Civil Engineer or Certified Engineering Geologist who is registered pursuant to California law or other person as may be permitted under the provisions of the California Business and Professions Code to assume responsible charge of such work. Waste shall not be placed into the pond until the Executive Officer notifies the Discharger in writing that the post construction report is acceptable. The post construction report shall include: (1) verification that the pond meets the requirements of this Order as specified in General Specification B.9 including documentation of the results of the construction quality assurance testing and observations, (2) certification that the pond was constructed as designed, and (3) as-built diagrams.

11. The level of waste in the dairy or dairy manure digester/co-digester wastewater retention ponds shall be kept a minimum of two (2) feet from the top of each aboveground embankment and a minimum of one (1) foot from the ground surface of each belowground pond. Less freeboard may be approved by the Executive Officer when a Civil Engineer or Certified Engineering Geologist who is registered pursuant to California law, or other person as may be permitted under the provisions of the California Business and Professions Code to assume responsible charge of such work, demonstrates that the structural integrity of the pond will be maintained with the proposed freeboard.
12. All ponds shall be managed and maintained to prevent breeding of mosquitoes and other vectors, and be operated in accordance with the following:
 - a. Small coves and irregularities shall not be allowed around the perimeter of the water surface;
 - b. Weeds shall be minimized through control of water depth, harvesting, or other appropriate method;
 - c. Dead algae, vegetation, and debris shall not accumulate on the water surface; and
 - d. Management shall be in accordance with the requirements of the Mosquito Abatement District.
13. All precipitation and surface drainage outside of manured areas including that collected from roofed areas, and runoff from tributary areas up to and including during a 25-year, 24-hour storm event, shall be diverted away from any feed or feedstock storage areas, manured areas, and digestate/digester generated soil amendment areas, unless such drainage is fully retained in the wastewater retention system.
14. Ponds designated to contain the 25-year, 24-hour storm event runoff must have a depth marker that clearly indicates the minimum capacity necessary to contain the runoff and direct precipitation from a 25-year, 24-hour storm event.
15. All roofs, buildings, and non-manured areas located in the production areas of the dairy and digester/co-digester operations shall be constructed or otherwise designed so that clean rainwater is diverted away from manured areas, feed and feedstock storage areas, and waste containment facilities, unless such drainage is fully contained in the wastewater retention system.

16. Roof drainage from dairy production areas or digester facilities shall not drain into the corrals or other areas containing waste unless these areas are properly graded and drained to the wastewater retention system.
17. The milk parlor, animal confinement area (including corrals), manure and feed storage areas, and digester feedstock and digestate storage areas shall be designed and maintained to minimize infiltration and convey all water that has contacted animal feed, wastes, digester feedstock, or digester waste to the wastewater retention system within 72 hours after the last rainfall.
18. Unlined ditches, swales, and/or earthen-berm channels may not be used for storage of process wastewater, manure, or tailwater and may only be used for: conveyance of wastewater collected in the dairy production area and digester facility area to the retention pond(s); conveyance of wastewater from the retention pond(s) to the land application area; irrigation return water management; or for temporary control of accidental spills or rainfall-induced overflows at the dairy and digester facilities designed, constructed, operated, and maintained in compliance with General Specifications B.1, B.2, and B.3.
19. All materials imported or used for dairy co-digestion must pass through the digester and be capable of aiding or assisting the digestion process.

C. Land Application Area Specifications

1. Land application of all waste from the facility to areas under the Discharger's control shall be conducted in accordance with a certified Nutrient Management Plan (required in Submittal Schedule [Table 1] below) consistent with the technical standards for nutrient management as specified in Attachment D. The Nutrient Management Plan shall be modified within 90 days if monitoring shows that discharge from the land application fails to comply with the Groundwater Limitations of this Order. The modifications must be designed to bring Dischargers into compliance with this Order.
2. Prior to transfer of waste, the Discharger shall have a written agreement with each third party that receives process wastewater from the Discharger for its own use. Each written agreement shall be included in the Discharger's Facility Information Report, Nutrient Management Plan, and Annual Report. The written agreement(s) shall be effective until the third party is covered under waste discharge requirements or a waiver of waste discharge requirements that is adopted by the Central Valley Water Board. The written agreement shall:
 - a. Clearly identify:

- i. The Discharger and dairy or digester facility from which the process wastewater originates,
 - ii. The third party that will control the application of the process wastewater to cropland,
 - iii. The Assessor's Parcel Number(s) and the acreage(s) of the cropland where the process wastewater will be applied, and
 - iv. The types of crops to be fertilized with the process wastewater.
 - b. Include an agreement by the third party to:
 - i. Use the process wastewater at agronomic rates appropriate for the crops to be grown and
 - ii. Prevent the runoff to surface waters of wastewater, storm water, or irrigation supply water that has come into contact with manure or is blended with wastewater.
 - c. Include a certification statement, as specified in General Reporting Requirements C.8 of the Standard Provision and Reporting Requirements (which is attached to and made part of this Order), which is signed by both the Discharger and third party.
3. Land application of wastes for nutrient recycling from the dairy and/or digester/co-digester operations shall not cause the underlying groundwater to contain any waste constituent, degradation product, or any constituent of soil mobilized by the interactions between applied wastes and soil or soil biota, to exceed the groundwater limitations set forth in this Order.
4. Application of all liquid waste, manure, and digestate to the land application area shall be conducted in accordance with a NMP prepared by a specialist who is certified in developing NMPs. A copy of the NMP bearing the signature of the certifier must be submitted to the Central Valley Water Board and a copy shall be kept at the facility(s) to be available for review at all times to site-operational personnel. The NMP shall reflect actual crops grown at the facility, the actual form of nutrients and non-nutrient salts applied to each field, and reasonable application rates.
5. The application of waste to the land application areas shall be at rates that preclude development of vectors or other nuisance.

6. All process wastewater applied to land application areas must infiltrate completely within 72 hours after application.
7. Process wastewater shall not be applied to land application areas during periods when the soil is at or above field moisture capacity unless consistent with a certified Nutrient Management Plan (see Attachment D).
8. Wastes shall not be applied closer than 100 feet to any down gradient surface waters unless: a 35-foot wide vegetated buffer or physical barrier is substituted for the 100-foot setback; or an alternative conservation practice or field-specific condition is demonstrated to provide pollutant reductions equivalent to or better than the reductions achieved by the 100-foot setback.
9. The discharge to surface waters from tile drainage systems than underlie co-digester land application areas when imported feedstocks are used is prohibited. Wastes shall not be applied closer than 100 feet to open tile line intake structures, sinkholes, or agricultural or domestic well heads unless the Discharger has submitted an adequate demonstration that alternative practices will be as protective as the 100-foot separation. Because of its technical nature the demonstration of equivalent protection must be prepared by a California licensed professional engineer or professional geologist with experience in hydrogeology.
10. Annual calculations showing the total nitrogen, phosphorus, potassium, and non-nutrient salts applied to each field, including from sources other than dry waste or wastewater is required. These calculations will be used to annually modify the NMP to bring the facility back into compliance with the Order.
11. Land application areas that receive dry manure, digestate, and digester or dairy wastewater shall be managed to minimize erosion. Crops must be planted within one month of dry manure, digestate, digester generated soil amendments or manure application.
12. Manure, digestate, digester generated soil amendments, and process wastewater applied to the land application area shall be at rates reasonable for the crop, soil, climate, special local situations, management system, and type of manure, digestate, digester generated soil amendment, and wastewater. In the absence of site specific data, reasonable application for salt shall mean that annual application rates shall not exceed 2,000 pounds per acre for fields that are single-cropped or 3,000 pounds per acre for fields that are multi-cropped. Actual application rates for both salts and nutrients are required to be verified annually.
13. Gas scrubber waste and waste generated by the co-digestion process that has the potential to be hazardous waste as defined in Title 22 CCR Section 66261.3, shall be chemically tested to evaluate disposal.

D. Groundwater Limitations

1. Discharge of waste from dairies with a dairy manure digester or co-digester shall not cause the underlying groundwater to exceed water quality objectives or background quality, whichever is greater; to unreasonably affect beneficial uses; or to cause a condition of pollution or nuisance. Water Quality Objectives are specified in the Central Valley Water Board's *Water Quality Control Plan for Sacramento and San Joaquin River*, Fourth Edition, and the *Water Quality Control Plan for the Tulare Lake Basin Plan*, Second Edition.

E. Provisions

1. The Discharger shall comply with the *Standard Provisions and Reporting Requirements for Waste Discharge Requirements General Order No. R5-2010-XXXX for Dairies with Manure Anaerobic Digester or Co-Digester Facilities* (Standard Provisions) dated XXXXX 2010, which is attached to and made part of this Order.
2. The Discharger shall comply with all applicable provisions of the California Water Code, Title 27 CCR, and the applicable Water Quality Control Plans.
3. The Discharger shall comply with the attached Monitoring and Reporting Program No. R5-2010-XXXX which is part of this Order, and future revisions thereto or with an individual monitoring and reporting program, as specified by the Central Valley Water Board or the Executive Officer.
4. A discharge of waste that creates or threatens to create a condition of nuisance or pollution, or non-compliance with any part of this Order, is grounds for enforcement and/or revocation of coverage under this Order.
5. The Discharger shall comply with all requirements of this Order and all terms, conditions, and limitations specified by the Executive Officer.
6. The Discharger must maintain coverage under this Order or a subsequent revision to this Order until all, feedstock materials, digestate, process wastewater, solid manure, and animal waste impacted soil, including soil within the pond(s)/ digester, are disposed of or utilized in a manner which does not pose a threat to surface water or groundwater quality or create a condition of nuisance. At least 90 days before desiring to terminate coverage under this Order, the Discharger shall submit to the Executive Officer a closure plan that ensures protection of surface water and groundwater. No more than 30 days after completion of site closure, the Discharger shall submit a closure report which documents that all closure activities were completed as proposed and approved in the closure plan. Coverage under this Order will not be terminated until cleanup is complete.

7. A complete NOI form, filing fee, and FIR must be filed by the Discharger for each proposed site covered by this Order. The NOI and FIR forms may be modified by the Executive Officer as the need arises. NOI and FIR forms are attached (Attachment A) to this Order.
8. The Discharger shall submit copies of each NOI and FIR to the appropriate regional office(s) of the Department of Fish and Game, local water district, City Planning Department, County Health Department(s), County Planning Department(s), and County Agricultural Commissioner(s) with jurisdiction over the proposed application site(s). Also, the Discharger shall notify adjacent property owners with parcels abutting the subject land application site and, where applicable, tenants. The Discharger shall submit proof to the Executive Officer that all the above agencies and persons were notified.
9. A groundwater monitoring and sampling plan is required as part of the FIR unless the Discharger submits documentation that the Discharger has applied to or joined an approved Representative Monitoring Program (RMP) and demonstrated that data from the approved RMP can be substituted for some or all of the groundwater monitoring data that would be collected under the individual groundwater monitoring and sampling plan otherwise required by the FIR. Either approval of the plan by the Executive Officer or acceptance into the approved RMP is required prior to issuing a Notice of Applicability. For Dischargers at facilities where individual monitoring is required, the ground water monitoring system must be in place within six month of the date the Executive Officer issues the Notice of Applicability and groundwater must be sampled quarterly for a minimum of two quarters prior to facility operation.
10. The Discharger must comply with all conditions of this Order, including timely submittal of technical and monitoring reports as directed by the Executive Officer. Accordingly, the Discharger shall submit to the Central Valley Water Board on or before each report due date the specified document or, if an action is specified, a written report detailing evidence of compliance with the task. If noncompliance is being reported, the reasons for such noncompliance shall be stated, plus an estimate of the date when the Discharger will be in compliance. The Discharger shall notify the Central Valley Water Board by letter when it returns to compliance with the time schedule. Violations may result in enforcement action, including Central Valley Water Board or court orders requiring corrective action or imposing civil monetary liability, or in terminating the applicability of this Order to a specific facility or Discharger.
11. Technical reports (Monitoring Well Installation and Sampling Plan, Monitoring Well Installation Completion Report, Groundwater Monitoring Report, Waste Management Plan Certification, and portions of the Waste Management Plan)

required by this Order must be certified by an appropriately licensed professional as required in this Order and Attachments. If the Executive Officer provides comments on any technical report, the Discharger will be required to address those comments.

12. The Discharger shall maintain a copy of this Order at the site so as to be available at all times to site-operating personnel. The Discharger, landowner and his/her designee shall be familiar with the content of this Order.
13. If the Discharger becomes aware that it failed to submit a relevant fact in a NOI or FIR, or submitted incorrect information in a NOI or in any report to the Central Valley Water Board, it shall promptly submit the correct facts or information.
14. The Discharger must notify the Executive Officer in writing at least 30 days in advance of any proposed transfer of this Order's responsibility and coverage to a new Discharger. The notice must include a new NOI for the proposed Discharger, a NOT for the existing Discharger, and a specific date for the transfer of this Order's responsibility. This notification shall include an acknowledgment that the existing Discharger is liable for compliance with this Order and for all violations up to the transfer date and that the new Discharger is liable for compliance with this Order and all violations after the transfer date.
15. If during the performance of Discharger and/or Central Valley Water Board staff inspections, deficiencies, defects, and/or impending failures are observed in any of the wastewater conveyance, control, and/or retention structures, the Discharger shall take immediate action to correct and/or prevent any unauthorized release. The corrective action(s) should be documented and these records attached to the pertinent inspection report.
16. If the Central Valley Water Board Executive Officer notifies the Discharger that the NMP is not consistent with this Order, revisions shall be made by a specialist who is certified in developing Nutrient Management Plans and submitted to the Central Valley Water Board in writing within 30 days of notification.

F. EFFECTIVE DATE OF COVERAGE UNDER THIS ORDER

1. Coverage under this Order is effective upon receipt of NOA issued by the Executive Officer that this Order applies to the Discharger.

G. PERMIT REOPENING, REVISION, REVOCATION, AND RE-ISSUANCE

1. The Central Valley Water Board will review this Order periodically and may revise requirements when necessary for reasons including, but not limited to:

- a. If more stringent applicable water quality standards are adopted in the Basin Plans, the Central Valley Water Board may revise and modify this Order in accordance with such standards.
 - b. To address any changes in state plans, policies, or regulations that would affect the water quality requirements for the discharges and as authorized by state law.
2. The Central Valley Water Board or the Executive Officer may revoke coverage under this Order at any time and require the Discharger to submit a Report of Waste Discharge and obtain individual waste discharge requirements.

H. REQUIRED REPORTS AND NOTICES

1. The Applicant of a dairy manure digester or co-digester project must submit the following in accordance with Table 1: Submittal Schedule K.1:
 - a. **Facility Information Report (FIR)** - The Applicant shall submit an FIR for the dairy and digester/co-digester facilities, prepared in accordance with Attachment B. The required elements of a complete FIR are summarized in Table 1, Submittal Schedule K.1, and include:
 - i. Monitoring Well Installation and Sampling Plan, as appropriate;
 - ii. Nutrient Management Plan;
 - iii. Waste Management plan;
 - iv. Salt Minimization Plan; and
 - v. Wastewater Retention Pond Design Plan, as appropriate.
 - b. **Annual Report** -The Discharger shall submit an Annual Report for the previous year's monitoring, planting and harvesting by 1 August of each year. The Annual Report shall contain those elements required by Reporting Requirements G.2 of MRP R5-2010-XXXX, or any subsequent revision to the MRP...
 - c. **Groundwater Reporting** – The Discharger shall submit groundwater monitoring reports by 1 August of each year. Groundwater monitoring reports shall contain those elements required by Reporting Requirements G.3 of MRP R-5-2010-XXXX or any subsequent revision to the MRP.
 - c. **Groundwater Limitations Analysis Report** -The Discharger shall submit a Groundwater Limitations Analysis Report by 12 months after receiving a notice of applicability from the Executive Officer. The Groundwater Limitations Analysis Report shall contain those elements required by

Reporting Requirements G.4 of MRP R-5-2010-XXXX or any subsequent revision to the MRP.

2. Reporting Provisions:

- a. All Reports of Waste Discharge, applications, annual reports, or information submitted to the Central Valley Water Board shall be signed and certified in accordance with C. 7 and C.8 of the Standard Provisions.
- b. The Discharger shall submit all reports as specified in the attached Monitoring and Reporting Program No. R5-2010-XXXX.
- c. Any Discharger authorized to discharge waste under this Order shall furnish, within a reasonable time, any information the Central Valley Water Board may request, to determine whether cause exists for modifying, revoking, and reissuing, or terminating their authorization for coverage under this Order. The Discharger shall, upon request, also furnish to the Central Valley Water Board copies of records required to be kept by this Order.
- d. All reports prepared and submitted to the Executive Officer in accordance with the terms of this Order shall be available for public inspection at the offices of the Central Valley Water Board.

J. RECORD-KEEPING REQUIREMENTS

1. The Discharger shall create, maintain for five years, and make available to the Central Valley Water Board upon request by the Executive Officer any reports or records required by this Order including those required under Monitoring and Reporting Program No. R5-2010-XXXX.

K. SCHEDULE OF TASKS

1. Dairy manure digester or co-digester project proponents seeking coverage under this Order are required to submit a complete NOI and FIR for consideration by Central Valley Water Board staff. The elements of the NOI and FIR are included in Table 1: Submittal Schedule. Following receipt of an NOA from the Executive Officer, the Discharger(s) must submit an Annual Report and a Groundwater Limitations Report in accordance with Table 1: Submittal Schedule.

WASTE DISCHARGE REQUIREMENTS ORDER NO. R5-2010-XXXX
GENERAL ORDER FOR DAIRIES WITH MANURE ANAEROBIC
DIGESTER OR CO-DIGESTER FACILITIES

29

I, PAMELA C. CREEDON, Executive Officer, do hereby certify the foregoing is a full, true, and correct copy of an Order adopted by the California Regional Water Quality Control Board, Central Valley Region, on _____.

PAMELA C. CREEDON, Executive Officer

Order Attachments:

Schedule of Tasks - Table 1

Monitoring and Reporting Program

A. Monitoring Well Installation and Sampling Plan (MWISP)

A. Notice of Intent (NOI)

B. Facilities Information Report (FIR)

C. Notice of Termination (NOT)

D. Nutrient Management Plan (NMP)

E. Waste Management Plan (WMP)

F. Waste Manifest

G. Definitions

Information Sheet

Standard Provisions

WASTE DISCHARGE REQUIREMENTS ORDER NO. R5-2010-XXXX
GENERAL ORDER FOR DAIRIES WITH MANURE ANAEROBIC
DIGESTER OR CO-DIGESTER FACILITIES

30

Table 1. Submittal Schedule - required reports and notices.

Due Date	Submittal Due	Contents of Submittal	Professional Requirements
Upon Submission of Application for Coverage Under the Order	Notice of Intent	Air Quality Technical Report	Qualified Air Quality Specialist
		Construction Dust Control Plan	Qualified Air Quality Specialist
		Odor Management Plan	Qualified Air Quality Specialist
		Encroachment Permit, if applicable.	As required by local permitting authority
		Biological Site Assessment Report	Qualified Biologist
		Standard "Phase I Type" Electronic Record Search	Qualified Professional
		Visual Assessment Report	Qualified Planner
		Cultural Resources Inventory Report	Qualified Cultural Resources Professional
		Construction Plans	As required by local building department
		Acoustic Report	Qualified Acoustic Specialist

WASTE DISCHARGE REQUIREMENTS ORDER NO. R5-2010-XXXX
GENERAL ORDER FOR DAIRIES WITH MANURE ANAEROBIC
DIGESTER OR CO-DIGESTER FACILITIES

31

Upon Submission of Application for Coverage Under the Order	Facility Information Report	Monitoring Well Installation and Sampling Plan *45 days after installation and completion of wells, submit a Monitoring Well Installation Completion Report.	California Registered Professional
		Nutrient Management Plan	Certified Nutrient Management Specialist
		Waste Management Plan	California Registered Professional
		Salt Minimization Plan	Certified Nutrient Management Specialist
		Wastewater Retention Pond Design Plan, as appropriate	California Registered Professional
Annually on 1 August	Annual Report	Annual Facility Report as detailed in Reporting Requirements G.2 of the MRP.	Certified Nutrient Management Specialist
		Groundwater Monitoring Report as detailed in Reporting Requirements G.3 of the MRP.	California Registered Professional
12 Months After Achieving Coverage Under the Order	Groundwater Limitations Analysis Report	The contents of this submittal are detailed in Reporting Requirements G.4 of the MRP	California Registered Professional